Daniel Wall/SUPR/R7/USEPA/US 04/14/2006 10:39 AM

To Larry Erickson

cc bob.geller, Eric Gilstrap, Gene Gunn, tim.duggan, Cheryle Micinski

bcc

Subject Re: West Lake OU2 FS

Larry,

We appreciate your willingness to work with us on the review times. The OU 2 FS is the document needing the expedited review and we have that in hand. Any past delays and who might have been to blame doesn't factor in at this point. My marching orders are to try to follow through and get the RODs this FY. It won't be easy, but we're going to try. I think we have an outside shot because we have essentially completed the OU 1 FS, and the OU 2 FS is presumptive. Eric, Shawn and I conferenced vesterday afternoon and I filled them in on where we are and what the schedule is.

We need to have the Proposed Plan to the public by the first part of June to allow for a 60-day public comment period. Therefore, we need to approve the FS's by then. I am working on the PP in parallel with our review of the FS. Eric and Shawn asked the other programs to provide comments by the end of April and hopefully we can have all comments to the PRPs by mid-May. We will strive to have the comments give explicit instruction. All we really need the FS to do is to lay out the closure and post-closure requirements for a solid waste landfill, which has already been done in the OU 1 FS. I will try to jaw bone the PRPs into turning the document around quickly. Keep in mind that EPA is writing the PP and ROD(s). So, the FS does not have to perfectly capture the remedy decision we want to make. We just want to make sure that it is consistent with it. If there is anything specific the the DNR wants in the remedy, let me know and I'll try to work it in there.

With respect to ICs - you may recall that in the interest of time, we essentially did the evaluation ourselves and provided it to the PRPs along with our final comments on the OU 1 FS (see attached).



OU 1 FS Comments 02-16-06.doc

Larry Erickson larry.erickson@dnr.mo.gov

Larry Erickson <larry.erickson@dnr.mo.gov>

04/13/2006 02:59 PM

To Daniel Wall/SUPR/R7/USEPA/US@EPA

cc bob.geller@dnr.mo.gov, Gene Gunn/SUPR/R7/USEPA/US@EPA, Eric Gilstrap <eric.gilstrap@dnr.mo.gov>, tim.duggan@ago.mo.gov

Subject Re: West Lake OU2 FS

Thanks Dan! Yes I knew we (Eric, Shawn) were already working on the review. I was actually wondering when EPA wanted to meet w/us to discuss schedules. Gene had mentioned having a meeting in a discussion I had w/him a month or so ago and more recently, Dennis Stinson, DNR-Superfund, mentioned last week about EPA possibly wanting a meeting to discuss schedules.

It would be great to have a target schedule, to see when things like the public meeting, response to comments, etc. fall out. We are ready to conduct the necessary reviews as long as a reasonable timeframes are given. I don't want to be in a position of having to rush a review, for instance if a delay in

the schedule were caused by PRP delays. the PRP's have historically been very thorough which at times have resulted in a pretty long time to get anything back from them.

Please keep us involved with any negotiations EPA may have w/the PRP's. I know you mentioned there has been some discussion with the PRP's regarding the format/form of the existing IC's.

Larry V. Erickson, P.E. Federal Facilities Section 573/751-3907, FAX 573/526-5268

Wall.Daniel@epamail.epa.gov

04/13/2006 11:58 AM

CC

Subject West Lake OU2 FS

FYI - Following up on the impromptu meeting we had after the Weldon Spring event, I contacted the PRP contractor to see if they could provide an electronic version of the Draft OU 2 FS that could be readily distributed to DNR solid waste and others who need to review it. It seems Eric Gilstrap and Shawn Munks were on the ball and had already made the request and had already been sent an electronic version on April 7th. I called Eric to confirm. Eric indicated that they got what they needed and had already distributed to Solid Waste, Air, DGLS, and the AGO.

EPA comments on the revised OU 1 Feasibility Study (FS) dated November 28, 2005

We have reviewed the revised FS and supporting materials provided in the 11/28/05 email from Paul Rosasco. While most of EPA's comments have been adequately addressed, a few significant issues remain. With the intent of accelerating the resolution process, we have followed the comments with an attempt to illustrate how these comments may be resolved.

1. It is useful to describe and append the existing institutional controls (ICs); however, the existing ICs do not adequately address all the long-term IC requirements for the West Lake Landfill site. As the FS points out, additional use restrictions will be necessary to fully implement any of the implementable alternatives. Also, as EPA pointed out in its letter of September 6, 2005, the existing ICs reference the consent order for the RI/FS which will not be the operative document once the remedy implementation phase begins. Respondents state that the relevant and appropriate regulations for ICs are those requirements found in Subtitle D; while these requirements may well be ARARs, the requirements of Subtitle D alone are not sufficient to meet the standards for ICs at Superfund sites as set forth in EPA guidance, "Institutional Controls: A Guide to Implementing, Monitoring, and Enforcing Institutional Controls at Superfund, Brownfields, Federal Facility, UST and RCRA Corrective Action Cleanups", February 2003. Therefore, the ICs will need to be upgraded under any circumstances.

Currently, the FS and supporting IC document put an emphasis on explaining and justifying existing ICs rather than providing an FS level IC evaluation. A proper IC evaluation is independent of any existing ICs and the current approach tends only to confuse the matter. Also, the discussion provided tends to blur the distinction between "use restrictions" and "ICs". See EPA guidance for an explanation of what constitutes an IC evaluation: "Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups," September 2000. Generally, ICs should be evaluated in the same manner as any other component of the remedy.

The first step in the FS evaluation is to describe the land and resource use restrictions, for a given remedial alternative, necessary to both prevent exposures and maintain the integrity of the remedy. Use restrictions are the performance standards or objectives for the ICs. A precise description of the necessary land and resource use restrictions will need to be in the Record of Decision (ROD).

The next step is to evaluate the available IC instruments that may be used to implement the use restrictions. The objective of this evaluation is to establish that feasible and effective tools exist. EPA continues to believe that MDNR CALM Appendix E provides the best available format for implementing proprietary controls. The actual IC design and implementation strategy may be fully developed as part of the Remedial Design (RD) process. The following two comments elaborate on these points:

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2. Following up on the first step, the specific land and resource use restrictions necessary to maintain protectiveness and maintain the effectiveness of the capping alternatives should be clearly and concisely stated. The descriptions in the FS associated with Alternative L2 (Section 4.4.4.1.2) come close to accomplishing this but should be improved. Note that defining the use restrictions associated with Alternative L2 is less important than defining the use restrictions associated with the Subtitle D cap alternatives because Alternative L2 does not meet the threshold criteria and is not implementable. Also, the description in the FS attempts to combine requirements for cap and non-cap alternatives in the same discussion which tends to confuse the matter. The specific areas or locations to which restrictions are being ascribed should be better defined. For example, does "buffer zone" refer to the buffer area on the "Ford Property", some buffer area around Areas 1 & 2, or to the Missouri Code requirement for a buffer zone around a landfill? What is the border of "OU 1" in the context of a cap alternative? The geographic extent of the needed prohibitions on various structures is not clear. Are buildings allowable on the landfilled areas adjacent to "OU 1" or does the described need for radon testing and potential venting apply only to buildings beyond the perimeter of the landfills?

Absent any factual errors or some misunderstanding of what is intended, the following describes EPA's expectations for the necessary use restrictions:

The use restrictions or IC objectives described below apply to all cap alternatives meeting the Subtitle D cover system requirements, i.e., L4, L5, and L6. These restrictions must be maintained until the remaining hazardous substances are at levels allowing for unlimited use and unrestricted exposure, or for essentially as long as the landfill remains in place. These use restrictions do not apply to activities related to the implementation, maintenance, monitoring or repair of the remedy.

- A. These use restrictions apply within the boundary of the cover system(s) for Area 1 and Area 2, including all bordering buffer areas (OU 1 Area).
 - 1. Prevent development and use for residential housing, schools, childcare facilities or playgrounds.
 - 2. Prevent development and use for industrial or commercial purposes, such as manufacturing, offices, storage units, parking lots or other facilities that are incompatible with the function or maintenance of the landfill cover.
 - 3. Prevent construction activities involving drilling, boring, digging, or other use of heavy equipment that could disturb vegetation, disrupt grading or drainage patterns, cause erosion or otherwise compromise the integrity of the landfill cover; or, manage these activities such that any damage to the cover is avoided or repaired.
 - 4. Prevent the use of all groundwater underlying these areas.
 - 5. Retain access necessary for continued maintenance, monitoring, inspections and repair.

- B. The use restrictions for adjacent disposal areas including the Closed Demolition Landfill, the Inactive Landfill, and the Active Sanitary Landfill will be identified under West Lake Landfill OU 2 (OU 2 Area). Coordination across OUs will ensure the use restrictions are complementary.
- C. These use restrictions apply to the non-disposal areas of the West Lake Landfill site.
 - 1. Prevent development and use for residential housing, schools, childcare facilities or playgrounds.
 - 2. Any new or existing structures for human occupancy should be assessed for gas accumulation and mitigative engineering measures, such as foundation venting, should be employed as necessary.
 - 3. Manage any construction activities, such as drilling, boring, digging, or other use of heavy equipment to avoid disturbance of the OU 1 Area.
 - 4. Prevent the use of all groundwater underlying these areas.
 - 5. Retain access necessary for continued maintenance, monitoring, inspections and repair.

Contaminated soils may remain on portions of the Ford property which consists of the buffer property owned by Rock Road and Lot 2A2 owned by Crossroad Industries (see Figure 2-8). Under the Subtitle D landfill cover alternatives, it is anticipated that the toe of the landfill berm will be regraded and extended over the radiologically impacted areas. Under this scenario, the use restrictions listed under letter A above will encompass the impacted area of the Ford property and no additional use restrictions will be necessary to address this circumstance. Soil sampling will be undertaken to support RD and confirm these assumptions.

3. The FS should provide some preliminary evaluation of the available IC mechanisms that could be used to implement the necessary use restrictions. The purpose is to establish that there are likely to be reliable and durable mechanisms for implementation of the use restrictions. The FS should present some analysis consistent with the following:

The use restrictions will be implemented through the use of ICs. The specific IC design and implementation strategy will be a component of the RD planning process following release of the ROD by EPA. Where appropriate, multiple mechanisms, or a "layered" approach, will be used to enhance the effectiveness of the IC strategy. See Section 4.3.1 for the general categories of IC mechanisms.

The affected properties are privately owned and the use restrictions must be maintained for a long period of time; therefore proprietary controls should be considered because they generally run with the land and are enforceable. The primary examples of proprietary controls, covenants and easements, are based in real property law and generally create legal property interests. This involves placing a legal instrument in the chain of title of the property. A property

interest may be conveyed from the property owner (grantor) to a second party (grantee) for the purpose of restricting land or resource use. These types of controls can be binding on subsequent purchasers of property giving them a measure of long-term reliability.

Covenants under common law are typically promises to do something (affirmative) or not to do something (negative) on the land. In case of a breach of the covenant, contract law usually applies. This means that the available remedies in case of a breach of the covenant would generally be limited to monetary damages.

Restrictive covenants may be an effective tool for implementing and enforcing the use restrictions established as part of the remedy for the West Lake Landfill site.

Easements, allowing the easement holder to enter or use property for a stated purpose, could be useful for adjacent property, e.g., the Crossroad property, to secure access rights for any long-term monitoring or maintenance needs.

The IC component (Appendix E) of the Missouri Department of Natural Resources Cleanup Levels for Missouri (CALM), revised September 1998, consists primarily of a restrictive covenant with an easement provision that allows MDNR access to the site for the duration of the restrictive covenant for the purpose of conducting periodic inspections. As grantee, MDNR has the authority to enforce the restrictive covenant. CALM Appendix E instructs that the restrictive covenant state the intention of the property owner that the covenant and the easement will be effective in perpetuity or until the MDNR determines that they are no longer necessary. The MDNR intends such a statement to ensure that the court will interpret the restrictive covenant and easement to run with the land and be binding on the current owner and all subsequent owners of the property, regardless of any case law that might support a different conclusion. As such, the CALM Appendix E would provide a useful format for implementing use restrictions at the West Lake Landfill site. According to CALM Appendix E, the property owner is to sign and record the restrictive covenant with the Recorder's Office in the county in which the property is located.

The State of Missouri is considering adopting the Uniform Environmental Covenants Act (UECA) drafted by the National Conference of Commissioners on Uniform State Laws. If this occurs, the provisions of the UECA would apply to transfers of real properties contaminated with hazardous constituents. Under the UECA, once the governing regulatory authority and the property owner have determined to use an environmental covenant as part of a remediation project, the Act would supply the legal infrastructure for creating and enforcing that covenant under state law. If enacted, UECA is the preferred mechanism for implementing the land and resource use restrictions.

In addition to the above proprietary controls, the MDNR has promulgated regulations pertaining to the location and construction of water wells. The Well Construction Code (10 C.S.R. 23-3.010) prohibits the placement of a well within 300 feet of a landfill. These rules should provide an additional layer of protection against the placement of wells on or near the West Lake Landfill.

Also, the West Lake Landfill site has been listed by MDNR on the State's Registry of Confirmed, Abandoned, or Uncontrolled Hazardous Waste Disposal Sites in Missouri (Registry). The Registry is maintained by the MDNR pursuant to the Missouri Hazardous Waste Management Law, Section 260.440 RSMo. Sites listed on the Registry appear on a publicly available list. A notice is filed with the County Recorder of Deeds and notice must be provided by the seller to any potential buyers of the property.

The RD Work Plan will contain an IC design and implementation plan specifying the ICs and identifying the steps necessary to implement proprietary controls. At a minimum, the control will provide detailed descriptions of the types and locations of the residual contaminants, the parties involved, provisions for third party enforcement, the parties rights, the resource/use restrictions, language to assure that the IC is binding on subsequent purchasers, and specific notice and approval requirements for modifying or terminating a control. Title documentation will also generally be required.

The Operation and Maintenance (O&M) Plan will contain procedures for surveillance, monitoring and maintenance the ICs. The Plan will provide for notice to EPA and/or the state of any IC violations, planned or actual land use changes, and any planned or actual transfers, sales or leases of property subject to the use restrictions.

- 4. 3.2 Remedial Action Objectives, pg. 42 We do not follow the reasoning for the change indicating that collecting and treating contaminated groundwater is an applicable objective for OU 1. This objective is not reflected in the RAOs or any of the remedial alternatives.
- 5. 6.2 Primary Balancing Criteria, pg. 157 -- As explained in prior EPA comments and as pointed out in the preceding subsections of Section 6, Alternatives L2 and L3 simply do not meet relevant and appropriate requirements for solid waste management in the State of Missouri. These alternatives do meet the threshold criteria and are not implementable. The text should be modified to be clear on these points and L3 should be removed from the comparative analysis.
- 6. 6.2.4.2 Buffer Zone/Crossroad Property (Ford Property) Alternatives, pg. 164 The proposed change to the second paragraph could still be construed to indicate that some sort of authorized response action was undertaken by AAA trailer. The easiest way to fix this would be to remove the sentence.